

REMARKS

The final Office action mailed August 9, 2007 has been received and reviewed. The withdrawn claims are canceled without prejudice or disclaimer. The application is to be amended as previously set forth. Claims 48 through 52 have been added herein. All amendments and claim cancellations are made without prejudice or disclaimer. Claims 27 and 47 stand rejected as allegedly being obvious over Lin et al. and Hammond et al. Applicants respectfully traverse the rejection and request reconsideration.

1. Personal Interview

Applicants thank the Examiner for the courtesy extended during the interview conducted on October 3, 2007. Applicants appreciate the Examiner's helpful comments. As indicated in the Interview Summary, the substance of the interview is substantially as follows:

“Discussed the aspects of the invention that would distinguish the claims over the prior art.”

Applicants believes the foregoing description provided by the Examiner and agreed to by applicants' representative, taken with the comments contained with the remainder of this response, adequately sets forth the substance of the interview. *M.P.E.P.* § 713.04. If further comments are deemed necessary or helpful, the Office is kindly requested to contact applicants' undersigned attorney who will promptly provide any further detail desired.

2. 35 U.S.C. § 103:

Claim 27 and 47 stand rejected under 35 U.S.C. § 103 over Lin et al. in view of Hammond et al. Applicants respectfully traverse the rejections.

To establish a *prima facie* case of obviousness, the cited prior art references, when combined, must teach or suggest all of the claim elements. *In re Royka*, 490 F.2d 981, 985 (CCPA 1974); *see also* MPEP § 2143.03. Additionally, there must be “a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements” in the manner claimed. *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742, 167 L.Ed.2d 705, 75 USLW 4289, 82 U.S.P.Q.2d 1385 (2007). Further, to establish a *prima facie* case of

obviousness, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Underlying the obvious determination is the fact that statutorily prohibited hindsight cannot be used. *KSR*, 127 S.Ct. at 1742.

Regarding claim 27, applicants submit that the references do not establish a *prima facie* case of obviousness for amended claim 27. The references do not teach or suggest all of the elements of the claim. Neither reference teaches entering data . . . into a peptide compound database and . . . searching said peptide compound database. Therefore, for at least this reason, a *prima facie* case of obviousness has not been established. Support for the amendments to claim 27 may be found throughout the as-filed application, such as in originally-filed claims 30, 33, 36, and 42.

The Office asserts that Lin et al. discloses a search in a random peptide library of peptides of 3 to 70 amino acids in length to identify a compound that modulates glucose tolerance. The Office acknowledges that Lin et al. does not show a library comprising peptides consisting of three to nine amino acids in length. The Office asserts that Hammond et al. teaches searching a 3-mer, 4-mer, and 6-mer containing combinatorial peptide library.

Claim 50 is directed towards a peptide library. Claim 50 includes “producing a peptide library of said peptide fragments comprising peptides consisting of three (3) to nine (9) amino acids in length and wherein determining the identity of the peptide compound comprises searching said peptide library.” Support for claim 50 may be found throughout the as-filed specification, such as in paragraph [0060]. Applicants submit that claim 50 is patentable over the cited references.

Regarding Lin et al., applicants submit that a peptide length of 3-70 residues is mentioned only in relation to a very specific aspect of the Lin et al. publication, *i.e.*, truncations of an isolated PHIP protein having SEQ ID NO: 1. See, paragraphs [0065]-[0067] and claims 26 and 27 of Lin et al. Lin et al. prefers peptides having 12-20 residues. *Id.*

The size of 3-70 residues, however, has absolutely nothing to do with the peptides of a peptide library. The use of a peptide library is mentioned by Lin et al. in relation to methods for identifying compounds (*see, e.g.*, paragraphs [0156]-[0170]). Lin et al., however, is completely silent as to the size of the peptides in a peptide library. No working examples of screening a peptide library are provided by Lin et al. to provide any further guidance.

Hammond et al. teaches, *inter alia*, the screening of peptides for binding to a plasma protein using a peptide library. On its face, Hammond et al. does not relate to immunomodulatory peptides. Hammond et al. does not disclose any of the parameters to be tested according to applicants' claims. Similarly, Hammond et al. lacks even a hint or suggestion that a screening method for plasma proteins-binding ligands would yield a peptide that modulates the interaction of B class ephrins and PDZ domains according to Lin et al. Accordingly, absent hindsight, no motivation exists in Lin et al. to specifically search in a library of Hammond et al. as is done in the Office action. Absent such a motivation (and absent the application of impermissible hindsight), claim 50 is non-obvious. *KSR*, 127 S.Ct. at 1742.

Additionally, regarding claim 52, Hammond et al. does not disclose a library consisting of trimers and tetramers. Therefore, claim 52 is patentable over the cited references. Support for claim 52 may be found throughout the as-filed specification, such as at paragraphs [0060] and [0215].

In view of the foregoing, applicants request that the rejections be withdrawn, and the case passed to allowance. If, however, questions remain after consideration of the foregoing, the Examiner is kindly requested to contact applicants' undersigned attorney.

Respectfully submitted,



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